

## 石林石蝴蝶，中国云南苦苣苔科一新种<sup>\*</sup>

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**摘要：**对苦苣苔科石蝴蝶属一新种，石林石蝴蝶 *Petrocosmea shilinensis* 进行描述、绘图。该新种于 2008 年 10 月采自云南省石林县圭山地区。该新种相似于丝毛石蝴蝶 *P. sericea*，不同在于其叶基心形，叶背和叶柄的毛被倒生，花丝膝形且中部密生长约 1.5 mm 的髯毛。

**关键词：**苦苣苔科；新种；石林石蝴蝶；石林县；云南

**中图分类号：**Q 949

**文献标识码：**A

**文章编号：**0253-2700(2010) 04-328-03

### *Petrocosmea shilinensis*, a New Species of Gesneriaceae from Yunnan, China<sup>\*</sup>

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**Abstract:** *Petrocosmea shilinensis*, a new species of Gesneriaceae, is described and illustrated. The new species was collected at Guishan region of Shilin County, Yunnan Province in 2008. It is different from its similar species *P. sericea*, in its cordate base of leaf, retrorse indumentums on petioles and the abaxial surfaces of leaf, geniculate filaments with dense ca. 1.5 mm long beard-like indumentums in the middle.

**Key words:** Gesneriaceae; New species; *Petrocosmea shilinensis*; Shilin County; Yunnan Province

石蝴蝶属 *Petrocosmea* Oliv.，全世界约有 28 种，西自印度阿萨姆向东分布至我国湖北西部，北自秦岭南坡向南分布至越南和缅甸的南部。我国有 25 种，分布于云南、四川、陕西南部、湖北西部、贵州和广西西南部（王文采，1990；李振宇和王印政，2004；Wei and Wen, 2009）。2008 年 10 月初作者在云南省石林县圭山地区海拔 1 900~2 100 m 常绿阔叶林林缘潮湿的岩石壁上，采到苦苣苔科石蝴蝶属的一种植物。该植物叶片密被白色绢毛，与丝毛石蝴蝶 *Petrocosmea sericea* C. Y. Wu ex H. W. Li 的毛被极为相似。不过通过查阅石蝴蝶属的相关文献（李锡文，1983；王文采，1990；李振宇和王印政，2004；Wang, 1998；税玉民和陈文红，2006；Wei and Wen, 2009；Wei 等，2010），发现本种不同于已知的石蝴蝶属植物，故确定该种为特产圭山地区的一个新种，现予以报道。

#### 石林石蝴蝶 新种 石蝴蝶组 图 1

*Petrocosmea shilinensis* Y. M. Shui & H. T. Zhao, sp. nov. Sect. *Anisochilus*, Fig. 1.

**Type:** China (中国), Yunnan (云南), Shilin County (石林县), Guishan Town (圭山镇), on rocks or trees at the edge of broad-leaved forest, alt. ca. 2 000 m, in flowers, 10 Oct. 2008, Y. M. Shui *et al.* (税玉民等) 66771A (holotype, KUN).

Haec species *Petrocosmae sericeae* similis, sed foliis base parce cordatis (nec cuneate), foliis subtus petiolisus-que retrorsis sericeis, filamentis geniculatis (nec inflatis) longe barbatis (nec brevi pubescentibus) differt.

Herbs perennial, 10—20 cm tall. Rhizome 1—3 cm long, 1—2 mm in diam., densely covered with numerous fibrous roots. Leaves 15—20, basal, rosulate, herbaceous,

<sup>\*</sup> 基金项目：中国科学院“西部之光”项目资助（0402041121）

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收稿日期：2010-01-11，2010-02-01 接受发表

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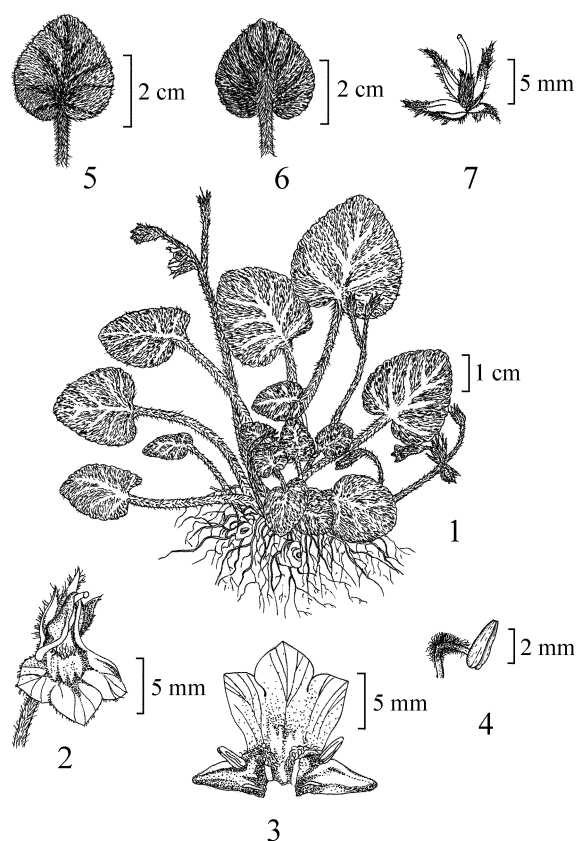


图1 石林石蝴蝶

1, 体态; 2, 花冠; 3, 雄蕊; 4, 可育雄蕊 (示髯毛);  
5, 雌蕊; 6, 叶正面; 7, 叶背面  
(张嵘梅根据税玉民等 66771A 号标本绘)

Fig. 1 *Petrocosmea shilinensis* Y. M. Shui & H. T. Zhao  
1, habit; 2, corolla; 3, stamen; 4, fertile stamen  
(showing beard-like hair); 5, pistil; 6, leaf, front view;  
7, leaf, back view (drawn by Zhang Rong-Mei from  
Y. M. Shui *et al.* 66771A, KUN)

round or broadly ovate, 1–3.5 cm long, 0.5–3 cm wide, apex round or obtuse, base cordate, margin crenate or nearly entire, the adaxial surface sparsely white sericeous; the abaxial surface densely covered with ca. 1.5 mm long retrorse sericeous indumentums; lateral veins 4–5 pairs, prominent on abaxial surface. Petioles 1–8 cm long, covered with white retrorse sericeous indumentums. Inflorescence 5–10, cymoid, 1–5-flowered; peduncle 3–6 cm long, pubescent; pedicel 0.3–2 cm long, pubescent. Calyx divided up to the base. Sepals 5, narrow triangular, ca. 6 mm long, 1–1.5 mm wide, patently pubescent outside, glabrous inside. Corolla purplish-blue, sparsely covered with white sericeous indumentums outside, glabrous inside. Corolla tube ca. 3 mm

long, pubescent outside, bifid; upper lip ca. 6 mm long, slightly 2-lobed, lobes ca. 0.5 mm long; lower lip ca. 12 mm long, trilobed up to the middle, lobes ovate-oblong, 3–4 mm long, 3–3.5 mm wide, top blunt. Stamens 2, ca. 0.8 mm away from the corolla base; filaments geniculate, ca. 4 mm long, covered with ca. 1.5 mm long white beard-like indumentums in the middle; anthers 2-celled, ca. 2.5 mm long; staminodes 2, narrow linear, ca. 0.6 mm long, semi-transparent, glabrous. Pistils ca. 7.5 mm; ovary pubescent, ca. 3.5 mm long; style ca. 4 mm long, glabrous. Fl. Sept. –Oct.

This new species is similar to *Petrocosmea sericea* C. Y. Wu ex H. W. Li (Fig. 2). In *P. shilinensis*, leaf base is cordate, indumentums are retrorse on petioles and the adaxial surface of leaves; filaments are geniculate and have ca. 1.5 mm long beard-like indumentums in the middle. In *P. sericea*, however, leaf base is cuneate, indumentums are not retrorse on petioles and the adaxial surface of leaves, filaments are inflated and have short pubescent indumentums.

多年生小草本，10~20 cm 高。根状茎 1~3 cm 长，1~2 mm 粗，有多数须根。叶 15~20 枚，均基生，呈莲座状。叶片草质，圆形或卵形，长 1~3.5 cm，宽 0.5~3 cm，顶端圆形或钝，基部心形，边缘有极浅圆齿或近全缘；叶腹面被稀疏白色绢毛，叶背面被较密的长约 1.5 mm 的白色倒生绢毛；叶脉每侧 4~5 条，背部突起；叶柄长 1~8 cm，密被由叶背延伸的倒生毛。花序 5~10，聚伞状，每花序有 1~5 花；花葶长 3~6 cm，密被长柔毛；苞片线形，长约 3 mm，被白色短柔毛；花梗 0.3~2 cm，密被长柔毛。花萼 5 深裂达基部，裂片狭三角形，长约 6 mm，宽 1~1.5 mm，外边被开展的柔毛，内面无毛。花冠蓝紫色，外被绢毛，内面无毛；花冠筒长近 3 mm，外面被白色短柔毛，内面无毛；上唇长约 6 mm，极不明显 2 浅裂，裂片长约 0.5 mm；下唇长约 12 mm，3 裂达中部，裂片卵形长圆形，长 3~4 mm，宽 3~3.5 mm，先端钝圆。可育雄蕊 2，着生于距花冠基部 0.8 mm 的位置；花丝膝形，中部密生长约 1.5 mm 的白色髯毛；花药 2 室，长约 2.5 mm；退化雄蕊 2，狭线形，长约 0.6 mm，半透明。雌蕊长约 7.5 mm。子房被短柔毛，长约 3.5 mm；花柱长 4 mm。花期 9~10 月。

本新种与丝毛石蝴蝶 *Petrocosmea sericea* 最为相近 (图 2)。该新种叶片基部心形，叶背和叶柄毛被倒生，花丝于中部膝弯，密被髯毛，花柱内藏。而丝毛石蝴蝶叶片基部楔形，叶背毛被和叶柄不倒生，花丝于中部膨大，毛被短绒毛，花柱外伸。



图 2 石林石蝴蝶 (左边) 与丝毛石蝴蝶 (右边)

A, 雄蕊, 示花丝的毛被; B, 雌蕊, 示子房与萼片; C, 花正面观; D, 叶柄和叶背面观 (税玉民拍摄)

Fig. 2 *Petrocosmea shilinensis* Y. M. Shui & H. T. Zhao (left) and *P. sericea* C. Y. Wu ex H. W. Li (right)

A, stamens, showing indumentums of filaments; B, pistil, showing ovary and sepals; C, front view of flower;

D, petiole and back view of leaf (photographer: Shui Yu-Min)

**致谢** 本文承张嵘梅女士细心绘图。在野外标本采集和室内标本鉴定过程中得到了陈文红女士的大力帮助。

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